	Туре	L#	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
1	BRS	L1	3	(course with alignment) near5 (marking) and waveguide and (optical with coupling)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/31 10:50		
2	BRS	L2		;`	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/31 10:51		
3	BRS	L3	3		, , ,	2004/08/31 10:52		
4	BRS	L5	14	(course with alignment) near5 (marking)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/31 10:53		

	Errors
1	0
2	0
3	0
4	0

	Туре	L#	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
1	BRS	L1	3	lithograph\$ near optic\$ near	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/24 10:51		

	Errors
1	0

.

,

	Туре	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition
1	BRS	L1	1	6636671.pn.	USPAT; US-PGPUB	2004/08/24 09:10		
2	BRS	L2	5	(lithographically near4 marking) same	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/24 09:11		

	Errors
1	0
2	0

# For Serial no. 10/672,329

```
Description
        Items
Set
                LITHOGRAP?
       149595
S1
      4539287
                OPTIC?
S2
       401472
                WAVE()GUIDE? OR WAVEGUIDE?
S3
                S1 AND S2 AND S3
         2757
S4
                S1(3N)S2(3N)S3
          433
S5
S6
           58
                S1(N)S2(N)S3
                RD (unique items)
           53
                S7 AND PY<=2000
           35
S9
                S8 AND MARK?
S10
            4
                S8 AND CHANNEL?
                S8 NOT S10
S11
           31
? show files
       2:INSPEC 1969-2004/Aug W3
File
         (c) 2004 Institution of Electrical Engineers
       6:NTIS 1964-2004/Aug W3
File
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
       8:Ei Compendex(R) 1970-2004/Aug W3
File
         (c) 2004 Elsevier Eng.
                                 Info. Inc.
File 34:SciSearch(R) Cited Ref Sci 1990-2004/Aug W3
         (c) 2004 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File 99:Wilson Appl. Sci & Tech Abs 1983-2004/Jul
         (c) 2004 The HW Wilson Co.
File 94:JICST-EPlus 1985-2004/Aug W1
         (c) 2004 Japan Science and Tech Corp(JST)
File 92:IHS Intl.Stds.& Specs. 1999/Nov
         (c) 1999 Information Handling Services
File 144: Pascal 1973-2004/Aug W3
         (c) 2004 INIST/CNRS
File 647:CMP Computer Fulltext 1988-2004/Aug W3
         (c) 2004 CMP Media, LLC
File 696:DIALOG Telecom. Newsletters 1995-2004/Aug 23
         (c) 2004 The Dialog Corp.
     35:Dissertation Abs Online 1861-2004/Jul
         (c) 2004 ProQuest Info&Learning
     65: Inside Conferences 1993-2004/Aug W4
         (c) 2004 BLDSC all rts. reserv.
File 103:Energy SciTec 1974-2004/Aug B1
         (c) 2004 Contains copyrighted material
File 350:Derwent WPIX 1963-2004/UD, UM &UP=200454
         (c) 2004 Thomson Derwent
File 347: JAPIO Nov 1976-2004/Apr (Updated 040802)
         (c) 2004 JPO & JAPIO
File 202: Info. Sci. & Tech. Abs. 1966-2004/Jul 12
         (c) 2004 EBSCO Publishing
File 239:Mathsci 1940-2004/Oct
         (c) 2004 American Mathematical Society
      95:TEME-Technology & Management 1989-2004/Jun W1
         (c) 2004 FIZ TECHNIK
      25:Weldasearch 1966-2003/Dec
File
         (c) 2004 TWI Ltd
      62:SPIN(R) 1975-2004/Jun W4
File
         (c) 2004 American Institute of Physics
      96:FLUIDEX 1972-2004/Aug
File
         (c) 2004 Elsevier Science Ltd.
      98:General Sci Abs/Full-Text 1984-2004/Jul
         (c) 2004 The HW Wilson Co.
File 266: FEDRIP 2004/Jun
```

Comp & dist by NTIS, Intl Copyright All Rights Res

ST.

₹.

```
(Item 1 from file: 6)
11/3, K/1
DIALOG(R) File 6:NTIS
(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.
1963912 NTIS Accession Number: AD-A308 781/4
 Distributed Bragg Grating Integrated-Optical Filters: Synthesis and
Fabrication
 Massachusetts Inst. of Tech., Cambridge. Research Lab. of Electronics.
 Corp. Source Codes: 001450082; 304050
  Report No.: ARO-34906.2-EL
  26 Jan 96
            7p
  Languages: English Document Type: Journal article
  Journal Announcement: GRAI9620
   Pub. in Jnl. of Vacuum Science Technology B, v13 n6 p2859-2864 Nov/Dec
1995. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S.
customers); (703)605-6000 (other countries); fax at (703)321-8547; and
email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road,
Springfield, VA, 22161, USA.
  NTIS Prices: PC A02/MF A01
  Descriptors: Gratings(Spectra); *Optical filters; Reprints; Silicon
dioxide; Chemical vapor deposition; Substrates; Etching; X rays; Optical
 waveguides ; Lithography ; Electron beams; Optical interferometers;
Optical analysis; Light transmission; Resonators; Design criteria; Bragg
scattering; Waveguide filters
 11/3, K/2
             (Item 2 from file: 6)
              6:NTIS
DIALOG(R) File
(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.
1936822 NTIS Accession Number: AD-A300 345/6
  Si/Ge Optical Bus Array and Binary Fan-out Hologram for Si-Based
Wafer-Scale Optoelectronic Interconnects
  (Bimonthly rept. 1 Dec 94-31 Jan 95)
  Graham, L.; Tang, S.; Ershov, O.; Chen, R. T.
  Radiant Research Lab., Austin, TX.
  Corp. Source Codes: 111549000; 429879
  20 Feb 95
            11p
  Languages: English
  Journal Announcement: GRAI9609
  Product reproduced from digital image. Order this product from NTIS by:
phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries);
fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is
located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
  NTIS Prices: PC A03/MF A01
                                 Signal
                                        processing; Optical equipment;
                Electrooptics;
  Descriptors:
              Computer aided design; Arrays; Chips(Electronics);
Optimization;
Fabrication; Prototypes; Substrates; Optical waveguides; Lithography;
Gratings (Spectra); Silicon; Circuit interconnections; Modules (Electronics);
Wafers; Research management; Holograms
              (Item 3 from file: 6)
 11/3, K/3
DIALOG(R) File 6:NTIS
(c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.
1905559 NTIS Accession Number: AD-A295 123/4
  Solid State Research
```

(Quarterly technical rept. no. 4, 1 Aug-31 Oct 94) Shaver, D. C. Massachusetts Inst. of Tech., Lexington. Lincoln Lab. Corp. Source Codes: 009875001; 207650 Report No.: ESC-TR-94-127 15 Nov 94 60p Languages: English Journal Announcement: GRAI9523 this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA. NTIS Prices: PC A04/MF A01 Quantum wells; Gallium arsenides; Aluminum gallium ...Descriptors: arsenides; Continuous waves; Chips(Electronics); Integrated circuits; Semiconductors; Etching; Optical waveguides; Lithography; Military research; Electric current; Electrical impedance; Analog systems; Solid state physics (Item 4 from file: 6) 11/3, K/46:NTIS DIALOG(R) File (c) 2004 NTIS, Intl Cpyrght All Rights Res. All rts. reserv. 1759517 NTIS Accession Number: AD-A269 024/6 Photonics in Switching. Organization of the 1993 Photonics Science Topical Meetings Held in Palm Springs, California on March 15 - 17, 1993. Technical Digest (Final rept) Quinn, J. W. Optical Society of America, Washington, DC. Corp. Source Codes: 044811000; 392813 Sponsor: Air Force Office of Scientific Research, Bolling AFB, DC. Report No.: AFOSR-TR-93-0637 17 Mar 93 240p Languages: English Document Type: Conference proceeding Journal Announcement: GRAI9324 this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA. NTIS Prices: PC A11/MF A03 ...Descriptors: switching; Light modulators; Electrooptics; Quantum electronics; Pixels; Amplifiers; Networks; Quantum wells; Pulsed lasers; X rays; Lithography; Optical waveguides; Semiconduc tors; Acoustooptics; Parallel processing; Crosstalk; Soft x rays (Item 1 from file: 8) 11/3, K/58:Ei Compendex(R) DIALOG(R) File (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. 05786260 E.I. No: EIP01025527734 Title: Near-field microscopy of photonic devices Author: Goldberg, Bennett B. Corporate Source: Boston Univ, Boston, MA, USA Conference Title: 13th Annual Meeting. IEEE Lasers and Electro-Optics Society 2000 Annual Meeting (LEOS 2000) Conference Location: Rio Grande

Source: Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS v 2 2000. IEEE, Piscataway, NJ, USA,00CB37080. p 426-427 Publication Year: 2000 CODEN: CPLSE4 ISSN: 1092-8081 Language: English Descriptors: Optical devices; Near field scanning optical microscopy; Integrated optics; Waveguides; Lithography; Surface topography (Item 2 from file: 8) 11/3, K/6DIALOG(R) File 8:Ei Compendex(R) (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. 05785937 E.I. No: EIP01025527476 Title: Methods for passive fiber chip coupling of integrated optical devices Author: Hauffe, R.; Siebel, U.; Petermann, K.; Moosburger, R.; Kropp, J.-R.; Arndt, F. Corporate Source: Technical Univ of Berlin, Berlin, Ger Conference Title: 50th Electronic Components and Technology Conference Conference Location: Las Vegas, NV, USA Source: Proceedings - Electronic Components and Technology Conference 2000. IEEE, Piscataway, NJ, USA,00CB37070. p 238-243 Publication Year: 2000 ISSN: 0569-5503 CODEN: PECCA7 Language: English ...Descriptors: optoelectronics; Optical fibers; Electronics packaging; Wavelength division multiplexing; Silicon on insulator technology; Flip chip devices; Optical waveguides; Lithography (Item 3 from file: 8) 11/3, K/7DIALOG(R) File 8:Ei Compendex(R) (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. 05733101 33101 E.I. No: EIP00125434912
Title: Anisotropically etched Si molds for fabricating fine optical E.I. No: EIP00125434912 components Author: Li, Y.; Fujii, T.; Sasaki, M.; Hane, K. Corporate Source: Tohoku Univ, Sendai, Jpn Conference Title: Micromachining and Microfabrication Process Technology Conference Location: Santa Clara, CA, USA Conference Date: 20001218-20001220 E.I. Conference No.: 57690 Source: Proceedings of SPIE - The International Society for Optical 2000. Society of Photo-Optical Instrumentation Engineering v 4174 Engineers, Bellingham, WA, USA. p 77-84 Publication Year: 2000 ISSN: 0277-786X CODEN: PSISDG Language: English

Descriptors: Micromachining; Anisotropy; Semiconducting silicon; Optical fiber coupling; Diffraction gratings; Reactive ion etching; Electron beam lithography; Optical waveguides; Nanotechnology; Photolithography

11/3, K/8 (Item 4 from file: 8)

```
DIALOG(R) File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
         E.I. No: EIP00075246305
  Title: Chemical and biological applications of porous silicon technology
  Author: Stewart, Michael P.; Buriak, Jillian M.
  Corporate Source: Purdue Univ, West Lafayette, IN, USA
  Source: Advanced Materials v 12 n 12 2000. p 859-869
  Publication Year: 2000
                 ISSN: 0935-9648
  CODEN: ADVMEW
  Language: English
  Descriptors: Porous silicon; Photoluminescence; Surface chemistry;
Crystal atomic structure; Biocompatibility; Biosensors; Chemical sensors;
Catalyst supports; Lithography; Optical waveguides
 11/3, K/9
              (Item 5 from file: 8)
DIALOG(R) File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
           E.I. No: EIP99035082809
05501028
  Title: Atom optics: basics and applications
  Author: Pfau, T.
  Corporate Source: Universitaet Konstanz, Konstanz, Ger
  Conference Title: Proceedings of the 1999 Pacific Rim Conference on
Lasers and Electro-Optcis (CLEO/PACIFIC Rim '99)
  Conference
                Location:
                             Seoul,
                                       South Korea Conference
19990830-19990903
  E.I. Conference No.: 56216
Source: Pacific Rim Conference on Lasers and Electro-Optics, CLEO - Technical Digest v 2 1999. IEEE, Piscataway, NJ, USA. p 248-249
  Publication Year: 1999
  CODEN: 002223
  Language: English
  Descriptors: Particle optics; Atomic physics; Interferometers;
Lithography; Optical waveguides; Diffractio n; Tungsten; Electric
potential; Electrodes; Electric field effects
               (Item 6 from file: 8)
 11/3, K/10
DIALOG(R) File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
05412856
           E.I. No: EIP99114893705
   Title: Highly strained GaInAs/GaAs QW for 1.2 mu m surface emitting
  Author: Koyama, F.; Schlenker, D.; Miyamoto, T.; Chen, Z.; Matsutani, A.;
Sakaguchi, T.; Iga, K.
  Corporate Source: Tokyo Inst of Technology, Yokohama, Jpn
  Conference Title: Proceedings of the 1999 IEEE/LEOS Summer Topical
Meeting on Nanostructures and Quantum Dots
  Conference
               Location:
                             San
                                    Diego,
                                             CA,
                                                    USA Conference
19990726-19990727
  E.I. Conference No.: 55505
  Source: LEOS Summer Topical Meeting 1999. p 23-24
  Publication Year: 1999
  ISSN: 1099-4724
  Language: English
```

...Descriptors: gallium compounds; Semiconducting gallium arsenide; Semiconductor quantum wells; Single mode fibers; Metallorganic chemical vapor deposition; Optical waveguides; Lithography; Etching; Copper (Item 7 from file: 8) 11/3, K/118:Ei Compendex(R) DIALOG(R)File (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. E.I. No: EIP98034133694 Title: Efficient frequency doubling of 1.5 mu m femtosecond laser pulses in quasi-phase-matched optical fibers Author: Pruneri, V.; Bonfrate, G.; Kazansky, P.G.; Simonneau, C.; Vidakovic, P.; Levenson, J.A. Corporate Source: Southampton Univ, Southampton, Engl Source: Applied Physics Letters v 72 n 9 Mar 2 1998. p 1007-1009 Publication Year: 1998 CODEN: APPLAB ISSN: 0003-6951 Language: English ...Descriptors: optics; Optical fibers; Fiber lasers; Second harmonic generation; Laser pulses; Diffraction gratings; Glass fibers; Nonlinear optics; Lithography; Optical waveguides (Item 8 from file: 8) 11/3, K/128:Ei Compendex(R) DIALOG(R)File (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. 04667291 E.I. No: EIP97043616278 Title: Semiconductor laser with tapered-rib adiabatic-following fiber coupler for expanded output-mode diameter Author: Vawter, G.A.; Smith, R.E.; Hou, H.; Wendt, J.R. Corporate Source: Sandia Natl Lab, Albuquerque, NM, USA Source: IEEE Photonics Technology Letters v 9 n 4 Apr 1997. p 425-427 Publication Year: 1997 CODEN: IPTLEL ISSN: 1041-1135 Language: English Descriptors: Semiconductor lasers; Optical fiber coupling; Optical waveguides ; Lithography ; Plasma applications; Quantum well lasers; Epitaxial growth; Light amplifiers; Quantum optics (Item 9 from file: 8) 11/3, K/138:Ei Compendex(R) DIALOG(R)File (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. 04580726 E.I. No: EIP96123473999 Title: Surface-emitted blue light from left bracket 112 right bracket -oriented (In,Ga)As/GaAs quantum well edge-emitting lasers Author: Ramos, P.A.; Towe, E. Corporate Source: Univ of Virginia, Charlottesville, VA, USA Source: Applied Physics Letters v 69 n 22 Nov 25 1996. p 3321-3323 Publication Year: 1996 CODEN: APPLAB ISSN: 0003-6951 Language: English ...Descriptors: well lasers; Second harmonic generation; Semiconducting

gallium compounds; Laser pulses; Current density; Molecular beam epitaxy;

```
Lithography; Waveguides; Optical resonators; Mirrors
              (Item 10 from file: 8)
 11/3, K/14
              8:Ei Compendex(R)
DIALOG(R)File
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
          E.I. No: EIP96033065924
   Title: Chirped DFB gratings using bent waveguides to tailor specific
laser properties
  Author: Hillmer, Hartmut
  Corporate Source: Deutsche Telekom, Darmstadt, Ger
  Conference Title: Fifth Int. Conference on Industrial Lasers and Laser
Applications '95
  Conference Location: Shatura, Moscow, Russia
                                                Conference Date: 19950624
  E.I. Conference No.: 22479
  Source: Proceedings of SPIE - The International Society for Optical
Engineering v 2713 1996. Society of Photo-Optical Instrumentation
Engineers, Bellingham, WA, USA. p 139-149
  Publication Year: 1996
                ISSN: 0277-786X ISBN: 0-8194-2088-3
  CODEN: PSISDG
  Language: English
  Descriptors: Semiconductor lasers; Diffraction gratings; Optical
waveguides; Lithography; Masks; Silicon wafers
               (Item 11 from file: 8)
DIALOG(R)File
               8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
         E.I. No: EIP94091388785
03941066
   Title: Application of three-dimensional micro-optical components formed
by lithography, electroforming, and plastic molding
  Author: Testorf, M.; Sinzinger, S.; Muller, A.; Moisel, J.; Kufner, S.;
Kufner, M.; Brener, K.H.; Gottert, J.; Mohr, J.
  Corporate Source: Univ Erlangen-Nurnberg, Erlangen, Ger
  Source: Applied Optics v 32 n 32 Nov 10 1993. p 6464-6469
  Publication Year: 1993
  CODEN: APOPAI
                 ISSN: 0003-6935
  Language: English
                         waveguides ; Lithography ; Electroforming;
  Descriptors: Optical
Optical devices; Plastics; Molding
 11/3, K/16
               (Item 12 from file: 8)
DIALOG(R)File
              8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.
           E.I. Monthly No: EI9210127196
03494438
   Title: Coupling and crosstalk between high speed interconnects in
ultralarge scale integrated circuits.
  Author: Bandyopadhyay, Supriyo
  Corporate Source: Dept of Electr Eng, Univ of Notre Dame, IN, USA
  Source: IEEE Journal of Quantum Electronics v 28 n 6 Jun 1992 p 1554-1561
  Publication Year: 1992
                 ISSN: 0018-9197
  CODEN: IEJQA7
  Language: English
```

...Descriptors: Fabrication; QUANTUM THEORY; LITHOGRAPHY; WAVEGUIDES, OPTICAL (Item 13 from file: 8) 11/3,K/17 DIALOG(R) File 8:Ei Compendex(R) (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. E.I. Monthly No: EI9110122499 03314420 Title: Semiconductor photonic integrated circuits. Author: Koch, Thomas L.; Koren, Uziel Corporate Source: AT&T Bell Lab, Holmdel, NJ, USA Source: IEEE Journal of Quantum Electronics v 27 n 3 Mar 1991 p 641-653 Publication Year: 1991 CODEN: IEJQA7 ISSN: 0018-9197 Language: English Descriptors: INTEGRATED OPTICS; OPTOELECTRONIC DEVICES; WAVEGUIDES , OPTICAL; LITHOGRAPHY; LASERS, SEMICONDUCTOR; SIGNAL RECEIVERS 11/3,K/18 (Item 14 from file: 8) 8:Ei Compendex(R) DIALOG(R) File (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. E.I. Monthly No: EI8810095531 Title: PROPAGATION OF SURFACE ELECTROMAGNETIC WAVES IN A DOUBLE OPEN WAVEGUIDE. Author: Lyndin, N. M.; Surov, S. P.; Sychugov, V. A. Source: Soviet Physics - Lebedev Institute Reports (English Translation of Sbornik Kratkie Soobshcheniya po Fizike. AN SSSR. Fizicheskii Institut im. N.N. Lebedva) n 12 1987 p 6-9 Publication Year: 1987 CODEN: SPLRD6 ISSN: 0147-6858 Language: English ...Descriptors: Propagation in Guides; SURFACE WAVES; LITHOGRAPHY; WAVEGUIDES, OPTICAL 11/3,K/19 (Item 15 from file: 8) 8:Ei Compendex(R) DIALOG(R)File (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. E.I. Monthly No: EI8711113072 02335344 CURRENT LOW THRESHOLD Title: AlGaAs/GaAs RIB-WAVEGUIDE SEPARATE-CONFINEMENT-HETEROSTRUCTURE DISTRIBUTED-FEEDBACK LASERS GROWN BY METALORGANIC CHEMICAL VAPOR DEPOSITION. Author: Honda, Kazuo; Hirata, Shoji; Ohata, Toyoharu; Horii, Shinichi; Corporate Source: Sony Corp, Yokohama, Jpn Source: IEEE Journal of Quantum Electronics v QE-23 n 6 Jun 1987 p 839-842 Publication Year: 1987 CODEN: IEJQA7 ISSN: 0018-9197 Language: ENGLISH ... Descriptors: Fabrication; SEMICONDUCTING ALUMINUM COMPOUNDS;

WAVEGUIDES , OPTICAL ; LITHOGRAPHY --

(Item 16 from file: 8) 11/3,K/20 8:Ei Compendex(R) DIALOG(R)File (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. E.I. Monthly No: EIM8605-032112 Title: E-BEAM TOOL REQUIREMENTS FOR NANOLITHOGRAPHY. Author: Cruttwell, Ian A.; Colbran, William V.; Wallman, Bernard A. Corporate Source: Cambridge Instruments Ltd, Cambridge, Engl Conference Title: Electron-Beam, X-Ray, and Ion-Beam Techniques for Submicrometer Lithographies IV. Conference Location: Santa Clara, CA, USA Conference Date: 19850314 E.I. Conference No.: 07161 Source: Proceedings of SPIE - The International Society for Optical Engineering v 537. Publ by SPIE, Bellingham, WA, USA p 2-6 Publication Year: 1985 ISSN: 0277-786X ISBN: 0-89252-572-X CODEN: PSISDG Language: English Identifiers: NANOLITHOGRAPHY; E-BEAM TOOL REQUIREMENTS; SYSTEM REQUIREMENTS AND IMPLEMENTATION; INTEGRATED OPTICAL WAVEGUIDE LITHOGRAPHY; SPECTRAL DENSITY FUNCTION; ELECTRON BEAM LITHOGRAPHY (Item 1 from file: 34) 11/3, K/21DIALOG(R) File 34:SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All rts. reserv. Genuine Article#: VJ628 No. References: 5 05230007 Title: TERAHERTZ WAVE-GUIDE COMPONENTS FABRICATED USING A 3D X-RAY MICROFABRICATION TECHNIQUE Author(s): MOON SW; MANN CM; MADDISON BJ; TURCU ICE; ALLOT R; HUQ SE; LISI Corporate Source: RUTHERFORD APPLETON LAB/DIDCOT OX11 0QX/OXON/ENGLAND/ Journal: ELECTRONICS LETTERS, 1996 , V32, N19 (SEP 12), P1794-1795 ISSN: 0013-5194 Language: ENGLISH Document Type: ARTICLE (Abstract Available) , 1996 (Item 1 from file: 94) 11/3, K/22DIALOG(R) File 94: JICST-EPlus (c)2004 Japan Science and Tech Corp(JST). All rts. reserv. JICST ACCESSION NUMBER: 94A0598412 FILE SEGMENT: JICST-E Photo-optical effect of polymers containing norbornadiene moieties. MORINO S (1); HORIE K (1); WATANABE T (2); MAGAYA Y (3); YAMASHITA T (4); NISHIKUBO T (5) (1) Univ. Tokyo, Tokyo, JPN; (2) Suzuki Motor Corp., JPN; (3) Miyazaki prefectural government, JPN; (4)Univ. Tokyo, Tokyo, JPN; (5) Kanaqawa Univ., Yokohama, JPN 1994 , VOL.7, NO.1, PAGE.121-126, FIG.7, REF.7 J Photopolym Sci Technol, JOURNAL NUMBER: L0202AAN ISSN NO: 0914-9244 CODEN: JSTEE UNIVERSAL DECIMAL CLASSIFICATION: 544.23-16:535/538 COUNTRY OF PUBLICATION: Japan LANGUAGE: English DOCUMENT TYPE: Journal ARTICLE TYPE: Original paper MEDIA TYPE: Printed Publication

...ABSTRACT: changes of films containing norbornadiene moiety were measured, and the applicability of these materials to **optical** waveguide lithography was examined. Refractive indices of PMMA films containing QCA were smaller than those of PMMA...

11/3,K/23 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2004 INIST/CNRS. All rts. reserv.

14946614 PASCAL No.: 01-0098367

High T SUB g polyarylate thin films for photonic device applications Proceedings of the Korea-Japan Joint Forum 1999: Organic Materials for Electronics and Photonics, Kyongju, Korea, September 9-11, 1999

SUGIHARA Okihiro; TOMIKI Masahiro; FUJIMURA Hisashi; EGAMI Chikara; OKAMOTO Naomichi; FUJIWARA Masaaki; YASUE Kenji

SASABE Hiroyuki, ed

Faculty of Engineering, Shizuoka University, 3-5-1 Johoku, Hamamatsu 432-8561, Japan; Research and Development Center, Unitika LTD., 23 Kozakura, Uji 611-0021, Japan

Korea-Japan Joint Forum 1999 (Kyongju KOR) 1999-09-09
Journal: Molecular crystals and liquid crystals science and technology.
Section A, Molecular crystals and liquid crystals, 2000 , 349 111-114
Language: English

Copyright (c) 2001 INIST-CNRS. All rights reserved.

2000

English Descriptors: Experimental study; Optical materials; Thin films;
 Electron beam lithography; Optical waveguides; Organic compounds;
 Arylate polymer; Thermal stability; Optical properties

11/3,K/24 (Item 2 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2004 INIST/CNRS. All rts. reserv.

14815700 PASCAL No.: 00-0498155

Polymer waveguide devices with passive pigtailing : an application of LIGA technology

Proceedings of the European Materials Research Society 1999 Spring Meeting, Symposium N: Molecular Photonics at the Interface of Physics, Chemistry and Biology, Strasbourg, France, 1-4 June, 1999

BAUER Hans-Dieter; EHRFELD Wolfgang; HARDER Michael; PAATZSCH Thomas; POPP Martin; SMAGLINSKI Ingo

LEDOUX-RAK Isabelle, ed; BAO Zhenan, ed

Institut fuer Mikrotechnik Mainz GmbH, Carl-Zeiss-Strasse 18-20, 55129 Mainz, Germany

Laboratoire de Photonique Quantique et Moleculaire, Ecole Normale Superieure de Cachan, France; Lucent Technologies, Murray Hill, NJ, United States

European Materials Research Society, Strasbourg, France E-MRS 1999 Spring Meeting. Symposium N (Strasbourg FRA) 1999-06-01 Journal: Synthetic metals, 2000 , 115 (1-3) 13-20 Language: English

Copyright (c) 2000 INIST-CNRS. All rights reserved. 2000

ij.

English Descriptors: Production process; Integrated optics; Waveguide; Lithography; Molding; Electroforming; Polymer; Preform 11/3, K/25(Item 3 from file: 144) DIALOG(R) File 144: Pascal (c) 2004 INIST/CNRS. All rts. reserv. PASCAL No.: 00-0435767 Active and passive components of 3D integrated optics Integrated optics devices IV : San Jose CA, 24-25 January 2000 WAECHTER C; BAUER T; CUMME M; DANNBERG P; ELFLEIN W; HENNIG T; STREPPEL U ; KARTHE W RIGHINI Giancarlo C, ed; HONKANEN Seppo, ed Fraunhofer-Institute for Applied Optics and Precision Engineering, Schillerstrasse 1, 07745 Jena, Germany; Institute of Applied Physics, Friedrich-Schiller-University Jena, Max-Wien-Platz 1, 07743 Jena, Germany International Society for Optical Engineering, Bellingham WA, United Integrated optics devices. Conference, 4 (San Jose CA USA) 2000-01-24 Journal: SPIE proceedings series, 2000 , 3936 130-138 Language: English Copyright (c) 2000 INIST-CNRS. All rights reserved. 2000 ... English Descriptors: coupler; Spin-on coatings; Plastic coating; Chemical vapor deposition; Patterning; Ultraviolet radiation; Reactive ion etching; Lithography; Optical waveguide; Active co mponent; Three dimensional model; Experimental study; Experimental result; Passive component; Topological structure; Light interferometers... (Item 4 from file: 144) 11/3, K/26DIALOG(R) File 144: Pascal (c) 2004 INIST/CNRS. All rts. reserv. PASCAL No.: 99-0534170 Fabrication techniques for grating-based optical devices LIM Michael H; MURPHY T E; FERRERA J; DAMASK J N; SMITH Henry I Department of Electrical Engineering and Computer Science, MIT, Cambridge, Massachusetts 02139 Journal: Journal of vacuum science & technology. B. Microelectronics and nanometer structures. Processing, measurement and phenomena, 1999 -11, 17 (6) 3208-3211 Language: English Copyright (c) 1999 American Institute of Physics. All rights reserved. 1999 -11 ... English Descriptors: Bragg gratings; Optical planar waveguides; Optical fabrication; Nanotechnology; Electron beam lithography; X-ray lithography ; ultraviolet lithography; Optical waveguide filters

(Item 1 from file: 350)

11/3, K/27

DIALOG(R) File 350: Derwent WPIX

(c) 2004 Thomson Derwent. All rts. reserv.

012026290

WPI Acc No: 1998-443200/ 199838

XRPX Acc No: N98-345782

Optically polymerisable resin composition for photosensitive printing used in optical waveguide lithography of opto electronic device comprises semiconductor ultrasmall particle, solvent, monomer and polymerisable initiator

Patent Assignee: MITSUI PETROCHEM IND CO LTD (MITC )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Date Applicat No Kind Date Week Patent No Kind 19980714 JP 96319186 19961129 199838 B Α JP 10186426 Α

Priority Applications (No Type Date): JP 96282022 A 19961024 Patent Details:

Main IPC Filing Notes Patent No Kind Lan Pg

JP 10186426 A 4 G02F-001/35

Optically polymerisable resin composition for photosensitive printing used in optical waveguide lithography of opto electronic device...

(Item 1 from file: 95) 11/3, K/28

DIALOG(R) File 95: TEME-Technology & Management

(c) 2004 FIZ TECHNIK. All rts. reserv.

01272860 E99010157220

Silicon nitride microclips for the kinematic location of optic fibres in silicon V-shaped grooves

Bostock, RM; Collier, JD; Jansen, R-JE; Jones, R; Moore, DF; Townsend, JE Univ. of Cambridge, GB; Cambridge Consultants, GB

Journal of Micromechanics and Microengineering, v8, n4, pp343-360, 1998 Document type: journal article Language: English

Record type: Abstract

ISSN: 0960-1317

335

DESCRIPTORS: SEMICONDUCTOR TECHNOLOGY; SILICON NITRIDE; OPTICAL WAVEGUIDES ; LITHOGRAPHY ; DIODE LASERS; MECHANICAL PROPERTIES

11/3,K/29 (Item 2 from file: 95)

DIALOG(R) File 95: TEME-Technology & Management

(c) 2004 FIZ TECHNIK. All rts. reserv.

01036362 M96100386622

Fabrication of microoptical components and systems by the LIGA technique (Herstellung mikrooptischer Komponenten und Systeme mit dem LIGA-Verfahren) Goettert, J; Mohr, J; Mueller, A; Mueller, C

Forsch.-Zentrum Karlsruhe, D

Entropie, v31, n192/193, pp20-25, 1995

Document type: journal article Language: English

Record type: Abstract

ISSN: 0013-9084

1995

DESCRIPTORS: OPTICAL LENSES; MICROOPTICS; X RAY LITHOGRAPHY; OPTICAL WAVEGUIDES; INTEGRATED OPTICS; SPECTROMETERS; LIGHT COHERENCE; ACRYL GLASS

; FLUOROCARBON RESINS; OPTICAL FIBER COUPLERS

```
(Item 1 from file: 62)
11/3,K/30
DIALOG(R) File 62:SPIN(R)
(c) 2004 American Institute of Physics. All rts. reserv.
00864755
  Fabrication techniques for grating-based optical devices
   Lim, Michael H.; Murphy, T. E.; Ferrera, J.; Damask, J. N.; Smith,
Henry I..
    Department of Electrical Engineering and Computer Science, MIT,
Cambridge, Massachusetts 02139
  J. VAC. SCI. TECHNOL. B; 17(6),3208-3211 (Nov. 1999) CODEN: JVTBD
  19991100
   Descriptors: Bragg gratings ; optical planar waveguides ; optical
fabrication ; nanotechnology ; electron beam lithography ; X-ray
lithography; ultraviolet lithography; optical waveguide filters
              (Item 1 from file: 98)
11/3,K/31
DIALOG(R) File 98:General Sci Abs/Full-Text
(c) 2004 The HW Wilson Co. All rts. reserv.
          H.W. WILSON RECORD NUMBER: BGSA00004518
Mirrorless lasing from mesostructured waveguides patterned by soft
  lithography.
Yang, Peidong
Wirnsberger, Gernot; Huang, Howard C
Science (Science) v. 287 no5452 (Jan. 21 2000) p. 465-7
SPECIAL FEATURES: bibl il ISSN: 0036-8075
LANGUAGE: English
COUNTRY OF PUBLICATION: United States
DESCRIPTORS:
           waveguides ; Lithography ; Silica; Rhodamine
   Optical
 2000
```

\*\*\*

*\$*.

```
Description
        Items
Set
                LITHOGRAP?
       149595
S1
      4539287
                OPTIC?
S2
                WAVE()GUIDE? OR WAVEGUIDE?
       401472
S3
         2757
                S1 AND S2 AND S3
S4
          433
                S1(3N)S2(3N)S3
S5
                S1(N)S2(N)S3
S6
           58
                RD (unique items)
S7
           53
                S7 AND PY<=2000
S8
           35
                S8 AND MARK?
S9
            0
                S8 AND CHANNEL?
S10
           4
                S8 NOT S10
           31
S11
                S3 AND (GLASS? OR SILICON?)
        42333
S12
        20930
                S3 (6N) (GLASS? OR SILICON?)
S13
S14
          386
                S1 AND S2 AND S13
                S1 (6N) S2 (6N) S13
S15
           94
           77
                S1 (4N) S2 (4N) S13
S16
           58
                S1 (3N) S2 (3N) S13
S17
S18
           52
                RD (unique items)
S19
           45
                S18 NOT S8
           21
                S19 AND PY<=2000
? show files
       2:INSPEC 1969-2004/Aug W3
File
         (c) 2004 Institution of Electrical Engineers
       6:NTIS 1964-2004/Aug W3
File
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
       8:Ei Compendex(R) 1970-2004/Aug W3
File
         (c) 2004 Elsevier Eng. Info. Inc.
     34:SciSearch(R) Cited Ref Sci 1990-2004/Aug W3
File
         (c) 2004 Inst for Sci Info
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
      99: Wilson Appl. Sci & Tech Abs 1983-2004/Jul
         (c) 2004 The HW Wilson Co.
File
      94:JICST-EPlus 1985-2004/Aug W1
         (c) 2004 Japan Science and Tech Corp (JST)
     92:IHS Intl.Stds.& Specs. 1999/Nov
         (c) 1999 Information Handling Services
File 144: Pascal 1973-2004/Aug W3
         (c) 2004 INIST/CNRS
File 647:CMP Computer Fulltext 1988-2004/Aug W3
         (c) 2004 CMP Media, LLC
File 696:DIALOG Telecom. Newsletters 1995-2004/Aug 23
         (c) 2004 The Dialog Corp.
      35:Dissertation Abs Online 1861-2004/Jul
         (c) 2004 ProQuest Info&Learning
      65: Inside Conferences 1993-2004/Aug W4
         (c) 2004 BLDSC all rts. reserv.
File 103:Energy SciTec 1974-2004/Aug B1
         (c) 2004 Contains copyrighted material
File 350:Derwent WPIX 1963-2004/UD, UM &UP=200454
         (c) 2004 Thomson Derwent
File 347: JAPIO Nov 1976-2004/Apr (Updated 040802)
         (c) 2004 JPO & JAPIO
File 202: Info. Sci. & Tech. Abs. 1966-2004/Jul 12
         (c) 2004 EBSCO Publishing
File 239:Mathsci 1940-2004/Oct
         (c) 2004 American Mathematical Society
     95:TEME-Technology & Management 1989-2004/Jun W1
         (c) 2004 FIZ TECHNIK
```

File 25:Weldasearch 1966-2003/Dec
(c) 2004 TWI Ltd

File 62:SPIN(R) 1975-2004/Jun W4
(c) 2004 American Institute of Physics

File 96:FLUIDEX 1972-2004/Aug
(c) 2004 Elsevier Science Ltd.

File 98:General Sci Abs/Full-Text 1984-2004/Jul
(c) 2004 The HW Wilson Co.

File 266:FEDRIP 2004/Jun
Comp & dist by NTIS, Intl Copyright All Rights Res

(Item 1 from file: 2) 20/3,K/1 DIALOG(R)File 2:INSPEC (c) 2004 Institution of Electrical Engineers. All rts. reserv. INSPEC Abstract Number: A9606-4282-001, B9603-4140-047 Title: Distributed Bragg grating integrated-optical filters: synthesis and fabrication Author(s): Wong, V.V.; Ferrera, J.; Damask, J.N.; Murphy, T.E.; Smith, H.I.; Haus, H.A. Author Affiliation: Dept. of Electr. Eng. & Comput. Sci., MIT, Cambridge, MA, USA Journal: Journal of Vacuum Science & Technology B (Microelectronics and Structures) Conference Title: J. Vac. Sci. Technol. B, Nanometer Microelectron. Nanometer Struct. (USA) vol.13, no.6 p.2859-64 Publisher: AIP for American Vacuum Soc, Publication Date: Nov.-Dec. 1995 Country of Publication: USA CODEN: JVTBD9 ISSN: 0734-211X SICI: 0734-211X(199511/12)13:6L.2859:DBGI;1-P Material Identity Number: C067-96001 U.S. Copyright Clearance Center Code: 0734-211X/95/13(6)/2859/6/\$6.00 Conference Title: 29th International Conference on Electron, Ion, and Photon Beam Technology and Nanofabrication Conference Sponsor: American Vacuum Soc.; IEEE; Opt. Soc. America Conference Date: 30 May-2 June 1995 Conference Location: Scottsdale, AZ, USA Language: English Subfile: A B Copyright 1996, IEE ...Abstract: presented. We combine interferometric lithography, spatial-phase-locked electron-beam lithography, X-ray nanolithography, and lithography with silica-on- silicon waveguiding substrates to optical waveguides and grating patterns that have multiple quarter-wave shifts along the grating length. Transmission filters... 1995 (Item 1 from file: 8) 20/3,K/2 DIALOG(R) File 8:Ei Compendex(R) (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. E.I. No: EIP00125437445 Title: Waveguide at 1500 nm using photonic crystal structures in silicon on insulator wafers Author: Loncar, Marko; Nedeljkovic, Dusan; Cotteverte, Jean-Charles; Doll, Theodor; Scherer, Axel; Gerretsen, Jurriaan; Pearsall, Thomas P. Corporate Source: Dep of Electrical Engineering, Pasadena, CA, USA Conference Title: Quantum Electronics and Laser Science Conference (QELS 2000) Location: San Francisco, CA, USA Conference Date: Conference 20000507-20000512 E.I. Conference No.: 57599 Source: Conference on Quantum Electronics and Laser Science (QELS) -Technical Digest Series 2000. p 27 Publication Year: 2000 CODEN: 002097 Language: English Descriptors: Optical materials; Silicon wafers; Integrated

optoelectronics; Crystal structure; Optical waveguides; Electron beam lithography; Etching; Silica; Semiconductor lasers; Light transmission

(Item 2 from file: 8) 20/3,K/3 DIALOG(R)File 8:Ei Compendex(R)

(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

E.I. No: EIP00115397014 05699611

Title: Macroporous silicon: Photonic crystal substrates at 1.55 mu m

Author: Rowson, S.; Chelnokov, A.; David, S.; Lourtioz, J.-M.

Corporate Source: Universite de Paris Sud, Orsay, Fr

Conference Title: 2000 Confernce on Lasers and Electro-Optics Europe (CLEO 2000)

Conference Date: 20000910-20000915 Conference Location: Nice, France

E.I. Conference No.: 57529

Source: Conference on Lasers and Electro-Optics Europe - Technical Digest 2000. IEEE, Piscataway, NJ, USA,00TH8505. p 322 CThE60

Publication Year: 2000

CODEN: 85PNA9 Language: English

ø.

waveguides; Photons; Substrates; Porous silicon Descriptors: Optical ; Crystal lattices; Lithography

(Item 3 from file: 8) 20/3,K/4

DIALOG(R) File 8:Ei Compendex(R)

(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

05553900 E.I. No: EIP00055165064

Title: Fabrication of high aspect ratio photonic bandgap structures on silicon-on-insulator

Author: Naydenkov, Mikhail; Jalali, Bahram

Corporate Source: Univ of California Los Angeles, Los Angeles, CA, USA

Conference Title: Integrated Optics Devices IV

USA Conference Location: San Jose, Conference Date: 19000124-19000125

E.I. Conference No.: 56741

Source: Proceedings of SPIE - The International Society for Optical Engineering v 3936 2000. p 33-39

Publication Year: 2000

CODEN: PSISDG ISSN: 0277-786X

Language: English

Descriptors: Silicon on insulator technology; Refractive index; waveguides ; Electron beam lithography ; Light modulation; Anisotropy; Reactive ion etching; CMOS integrated circuits; Optoelectronic devices; Aspect ratio

(Item 4 from file: 8) 20/3,K/5

8:Ei Compendex(R) DIALOG(R) File

(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

E.I. No: EIP00035072360 05490252

Title: Effects of grating heights on highly efficient unibond SOI waveguide grating couplers

Author: Ang, T.W.; Reed, G.T.; Vonsovici, A.; Evans, A.G.R.; Routley, P.R.; Josey, M.R.

Corporate Source: Univ of Surrey, Guildford, UK Source: IEEE Photonics Technology Letters v 12 n 1 2000. p 59-61 Publication Year: 2000 CODEN: IPTLEL ISSN: 1041-1135 Language: English

Descriptors: Optical waveguides; Waveguide couplers; Diffraction gratings; Silicon on insulator technology; Perturbation techniques; Rectangular waveguides; Electron beam lithography; Integrated optics

20/3,K/6 (Item 5 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

05375127 E.I. No: EIP99104821974

Title: Passive alignment of single-mode fibers to integrated polymer wavequide structures utilizing a single-mask process

Author: Moosburger, R.; Hauffe, R.; Siebel, U.; Arndt, D.; Kropp, J.; Petermann, K.

Corporate Source: Technische Universitat Berlin, Berlin, Ger Source: IEEE Photonics Technology Letters v 11 n 7 1999. p 848-850 Publication Year: 1999

CODEN: IPTLEL ISSN: 1041-1135

Language: English

Descriptors: Optical fiber coupling; Optical fiber fabrication; Single mode fibers; Optical waveguides; Organic polymers; Photoresists; Lithography; Semiconducting silicon; Integrated optics

20/3,K/7 (Item 6 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

05365155 E.I. No: EIP99094789735

Title: Analytical approximation for the evaluation of the effect of fabrication error on the reflectivity of a Bragg mirror

Author: Fiola, Roberto; Irace, Andrea; Cutolo, Antonello; Iodice, Mario Corporate Source: Universita degli Studi di Napoli 'Federico II', Naples, Italy

Conference Title: Proceedings of the 1999 Diffractive and Holographic Technologies, Systems, and Spatial Light Modulators VI

Conference Location: San Jose, CA, USA Conference Date: 19990127-19990129

E.I. Conference No.: 55276

Source: Proceedings of SPIE - The International Society for Optical Engineering v 3633 1999. p 270-278

Publication Year: 1999

CODEN: PSISDG ISSN: 0277-786X

Language: English

Descriptors: Diffraction gratings; Mirrors; Optical waveguides; Photolithography; Electron beam lithography; Silicon on insulator technology; Error analysis; Numerical methods

20/3,K/8 (Item 7 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)
(c) 2004 Elsevier Eng. Info. Inc. All rts. reserv.

E.I. No: EIP99064700626 05299384 Title: Grating couplers using silicon-on-insulator Author: Ang, T.W.; Reed, G.T.; Vonsovici, A.; Evans, A.G.R.; Routley, P.R.; Blackburn, T.; Josey, M.R. Corporate Source: Univ of Surrey, Guildford, Engl Conference Title: Proceedings of the 1999 Integrated Optics Devices III USA Conference Date: Conference Location: San Jose, CA, 19990125-19990127 E.I. Conference No.: 55077 Source: Proceedings of SPIE - The International Society for Optical Engineering v 3620 1999. p 79-86 Publication Year: 1999 ISSN: 0277-786X CODEN: PSISDG Language: English Descriptors: Waveguide couplers; Diffraction gratings; Integrated optics; Silicon on insulator technology; Silicon wafers; Optical wavequides; Electron beam lithography; Reactive ion etching; Thin films; Ion beams (Item 8 from file: 8) 8:Ei Compendex(R) DIALOG(R)File (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. 04929351 E.I. No: EIP98024042848 Title: Low cost integrated photonic systems Author: Bostock, R.M.; Townsend, J.E.; Jones, R.; Jansen, R.-J.E.; Moore, D.F. Corporate Source: Cambridge Consultants, Ltd, Cambridge, UK Conference Title: Proceedings of the 1997 10th IEEE Lasers and Electro-Optics Society Annual Meeting, LEOS. Part 2 (of 2) Conference Location: San Francisco, CA, USA Conference Date: 19971110-19971113 E.I. Conference No.: 47740 Source: Conference Proceedings - Lasers and Electro-Optics Society Annual Meeting-LEOS v 2 1997. IEEE, Piscataway, NJ, USA, 97CB36057. p 274-276 Publication Year: 1997 CODEN: CPLSE4 ISSN: 1092-8081 Language: English Descriptors: Integrated optoelectronics; Substrates; Optical fibers; waveguides; Cost effectiveness; Silicon nitride; Lithography ; Surface tension; Thermal expansion (Item 9 from file: 8) 20/3,K/10 DIALOG(R) File 8:Ei Compendex(R) (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. E.I. No: EIP96013016370 Title: High-modulation-depth and short-cavity-length silicon Fabry-Perot modulator with two grating Bragg reflectors Author: Liu, Mark Y.; Chou, Stephen Y. Corporate Source: Univ of Minnesota, Minneapolis, MN, USA Source: Applied Physics Letters v 68 n 2 Jan 8 1996. p 170-172 Publication Year: 1996 CODEN: APPLAB ISSN: 0003-6951 Language: English

Semiconducting silicon; Optical waveguides; Cavity resonators; Electron beam lithography; Silicon on insulator technology; Reactive ion etching; Light modulation (Item 10 from file: 8) 20/3,K/11 DIALOG(R)File 8:Ei Compendex(R) (c) 2004 Elsevier Eng. Info. Inc. All rts. reserv. E.I. No: EIP94041259089 Title: Electron lithography for optoelectronics Author: Clements, S.J.; Butler, M.J. Corporate Source: BNR Europe Ltd, Essex, Engl Conference Title: Annual Meeting of the IEEE Lasers and Electro-Optics Society Conference Location: San jose, CA, USA Conference Date: 19931115-19931118 E.I. Conference No.: 19848 Source: Conference Proceedings - Lasers and Electro-Optics Society Annual 1993. Publ by IEEE, IEEE Service Center, Piscataway, NJ, USA,93CH3297-9. p 26-27 Publication Year: 1993 ISBN: 0-7803-1263-5 Language: English Descriptors: Electron beam lithography; Integrated optoelectronics; Diffraction gratings; Optical waveguides; Semiconducting silicon (Item 1 from file: 34) 20/3,K/12 DIALOG(R) File 34:SciSearch(R) Cited Ref Sci (c) 2004 Inst for Sci Info. All rts. reserv. 05078831 Genuine Article#: TN816 No. References: 7 Title: DISTRIBUTED BRAGG GRATING INTEGRATED-OPTICAL FILTERS - SYNTHESIS AND **FABRICATION** Author(s): WONG VV; FERRERA J; DAMASK JN; MURPHY TE; SMITH HI; HAUS HA Corporate Source: SPECTRA DIODE LABS, 80 ROSE ORCHARD WAY/SAN JOSE//CA/95134 ; MIT, DEPT ELECT ENGN & COMP SCI/CAMBRIDGE//MA/02139 Journal: JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B, 1995 , V13, N6 (NOV-DEC ), P2859-2864 ISSN: 1071-1023 Document Type: ARTICLE (Abstract Available) Language: ENGLISH 1995 ... Abstract: presented. We combine interferometric lithography, spatial-phase-locked electron-beam lithography, x-ray nanolithography, lithography with silica-on- silicon waveguiding and optical substrates to define rib waveguides and grating patterns that have multiple quarter-wave shifts along the grating length. Transmission filters... 20/3,K/13 (Item 1 from file: 144) DIALOG(R) File 144: Pascal

(c) 2004 INIST/CNRS. All rts. reserv.

PASCAL No.: 01-0111919

Descriptors: Light modulators; Mirrors; Diffraction gratings;

Heat-Resistant Polyarylates for Waveguide-Type Device Application SUGIHARA Okihiro; TOMIKI Masahiro; FUJIMURA Hisashi; EGAMI Chikara; OKAMOTO Naomichi; AKIZUKI Takamasa; SHIRAI Hiromasa

Faculty of Engineering, Shizuoka University, 3-5-1 Johoku, Hamamatsu 432-8561, Japan; Research and Development Center, Unitika Ltd., 23 Kozakura, Uji 611-0021, Japan

Journal: Japanese Journal of Applied Physics Part II: Letters, 2000 -11-15, 39 (118) L1174-L1176
Language: English

Copyright (c) 2001 American Institute of Physics. All rights reserved.

2000 -11-15

English Descriptors: Experimental study; Optical waveguides ; Organic
insulators; Polymer films; Thermal stability; Glass transformations;
Electron beam lithography ; Chemical structure; Sputter etching

20/3,K/14 (Item 2 from file: 144) DIALOG(R)File 144:Pascal (c) 2004 INIST/CNRS. All rts. reserv.

14647833 PASCAL No.: 00-0319622

Chemical and biological applications of porous silicon technology

STEWART M P; BURIAK J M

Purdue Univ, West Lafayette IN, United States

Journal: Advanced Materials, 2000 , 12 (12) 859-869

Language: English

2000

... English Descriptors: function devices; Application; Photoluminescence; Surface chemistry; Crystal atomic structure; Biocompatibility; Biosensors; Chemical sensors; Catalyst supports; Lithography; Optical waveguides; Ellipsomet ry; Bioreactors; Porous silicon; Reviews; Bibliographies

20/3,K/15 (Item 1 from file: 347) DIALOG(R)File 347:JAPIO (c) 2004 JPO & JAPIO. All rts. reserv.

04750939 \*\*Image available\*\*
IR OPTICAL WAVEGUIDE

PUB. NO.: 07-043539 [JP 7043539 A] PUBLISHED: February 14, 1995 ( 19950214)

INVENTOR(s): SAKAGUCHI SHIGEKI

APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese

Company or Corporation), JP (Japan)

APPL. NO.: 04-247127 [JP 92247127] FILED: August 25, 1992 (19920825)

...PUBLISHED: 19950214)

### ABSTRACT

... make a transparent film-like plantar optical waveguide. Further, the waveguide film is patterned by lithography and RIE to obtain a patterned optical waveguide. By using germanium oxide glass, the obtained optical waveguide can be connected to a fluoride optical fiber and has

no optical loss in a...

20/3,K/16 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
(c) 2004 FIZ TECHNIK. All rts. reserv.

Passive optical waveguide devices by ion-exchange in glass Santhanakrishnan, T; Sreedhar, PR; Sirohi, RS Dept. of Phys., Indian Inst. of Technol., Madras, India Optik, v109, n1, pp1-4, 1998 Document type: journal article Language: English Record type: Abstract ISSN: 0030-4026

1998

DESCRIPTORS: INTEGRATED OPTICS; ION EXCHANGE; OPTICAL COUPLERS; OPTICALLY SPECIAL GLASS; OPTICAL WAVEGUIDES; CATION; SILVER; SODIUM; PERFORMANCE ANALYSIS; GLASS; LITHOGRAPHY; OPTICAL FABRICATION

20/3,K/17 (Item 2 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
(c) 2004 FIZ TECHNIK. All rts. reserv.

01152521 E97100979025

High efficiency focusing waveguide grating coupler with parallelogramic groove profiles

Liao, T; Sheard, S; Li, M; Zhu, J; Prewett, P Univ. of Oxford, GB; Ruhterford Appleton Lab., Chilton, GB Integrated Photonics Res., Postconf. Ed., Topical Meeting, Boston, USA, Apr 29 - May 2, 1996 1996 Document type: Conference paper Language: English Record type: Abstract

ISBN: 1-55752-439-4

1996

DESCRIPTORS: OPTICAL COUPLERS; OPTICAL WAVEGUIDES; BEAM FOCUSING; SURFACE STRUCTURE; SILICON DIOXIDES; SILICON NITRIDE; SEMICONDUCTOR TECHNOLOGY; E BEAM LITHOGRAPHY; INDEX OF REFRACTION; EFFICIENCY FACTOR

20/3,K/18 (Item 3 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
(c) 2004 FIZ TECHNIK. All rts. reserv.

01086592 E97031994063

Fabrication and performance of optical interconnect analog phase holograms made by electron beam lithography

(Phasenhologramme zur optischen Datenuebertragung durch Elektronenstrahllithographie)
Marker, PD; Wilson, DW; Muller, RE
Jet Propulsion Lab., Pasadena, USA
Optoelectronic Interconnects and Packaging, Proc. of a Conf., San Jose, USA, Jan 30-31, 1996 1996

Document type: Conference paper Language: English

Record type: Abstract ISBN: 0-8194-2017-4

W.

ä.

DESCRIPTORS: LIGHT COMMUNICATION; HOLOGRAPHY; E BEAM LITHOGRAPHY; LIGHT DIFFRACTION; ACRYL GLASS; OPTICAL WAVEGUIDES; HELMHOLTZ EQUATIONS; FOURIER ANALYSIS; LINK FAULT

20/3,K/19 (Item 4 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
(c) 2004 FIZ TECHNIK. All rts. reserv.

01009873 E96086744028

An optimized LIGA/MEMS process for polymer waveguides on a linear microactuator

(Ein optimierter LIGA-Prozess fuer mikroelektromechanische Systeme (MEMS) zur Herstellung von Wellenleitern aus Kunststoff auf einem linearen Mikroaktor)

Ghodssi, R; White, V; Herdey, C; Archie, C; Denton, Dd; McCaughan, L Univ. of Wisconsin, Madison, USA

 ${\tt Microstructures\ and\ Microfabricated\ Systems,\ Proc.\ of\ the\ 2nd\ Internat.}$ 

Symp., Chicago, USA, Oct 8-13, 1995 1995

Document type: Conference paper Language: English

Record type: Abstract ISBN: 1-56677-123-4

#### 1995

...DESCRIPTORS: SYNTHETIC MATERIALS; ACRYL GLASS; OPTICAL SWITCHES; OPTICAL WAVEGUIDES; X RAY LITHOGRAPHY; PHOTORESISTS; CHEMICAL ETCHING; ULTRAVIOLET IRRADIATION; ACETONE; BENZENE; LOW PRESSURE CVD; HYDROXIDES; SILICON NITRIDE; ELECTROPLATING; METALLIZATION...

20/3,K/20 (Item 5 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
(c) 2004 FIZ TECHNIK. All rts. reserv.

00869192 E95046129063

Sub-micrometer patterning of strip-ARROW structures by e-beam direct writing  $% \left( 1\right) =\left( 1\right) +\left( 1\right$ 

(ARROW-Streifenstrukturen im Submikrometerbereich durch direktes Elektronenstrahlschreiben)

Gehler, J; Braeuer, A; Karthe, W; Haase, N

Fraunhofer-Inst. for Applied Optics and Precision Engineering, Jena, D;

Nanofabrication Technol. and Devices Integration, Lindau, D, Apr 13-14, 1994 1994

Document type: Conference paper Language: English Record type: Abstract

## 1994

00417895

DESCRIPTORS: INTEGRATED OPTICS; OPTICAL WAVEGUIDES; STRIP LINES; DIRECTIONAL COUPLERS; SILICON; SILICON DIOXIDES; SUBMICROMETER; E BEAM LITHOGRAPHY

20/3,K/21 (Item 1 from file: 62)
DIALOG(R)File 62:SPIN(R)
(c) 2004 American Institute of Physics. All rts. reserv.

Strip diffuse waveguides on glasses, obtained by laser lithography

```
method
   Glebov, L. B.; Dukel'skii, K. V.; Nikonorov, N. V.; Petrovskii, G. T.
   Sov. J. Opt. Technol.; 56(5),322-323 (MAY 1989) CODEN: SJOTB

1989/05
   Descriptors: WAVEGUIDES ; GLASS ; ION EXCHANGE; DIFFUSION;
LITHOGRAPHY ; OPTICAL SYSTEMS ; LASER BEAM APPLICATIONS; FABRICATION ;
INTEGRATED OPTICS ;
```